

Applicant: Wurz et al.
Application No.: 09/766,815

REMARKS

Claims 2-27 are currently pending in this application. By the foregoing amendment, claims 2, 16, 18, and 21 have been amended and new claims 24-27 have been added to this application.

Specifically, claims 2, 16, 18, and 21 have each been amended to recite that: (1) the redirecting of the light beam toward the conveyor at a nonzero angle from a perpendicular therefrom results in a plurality of conveyor and object impact points as the redirected light beam defines a path across the width of the conveyor; and (2) that the apparatus measures the height of one edge of the object, relative to a conveyor surface, using the non zero angle and a distance between the plurality of object impact points located on the path on the one edge and the corresponding conveyor impact points located on a next adjacent path. The above amendments are supported originally filed figure 5 and the originally filed specification, page 7, line 21, through page 9, line 6.

New claims 24-27 each generally recite that a portion of the detector field of view, which intersects the conveyor, remains centered about the perpendicular extending from the conveyor throughout the measuring of the object. These claims are supported by originally filed figures 1, 4, and 5.

Applicants respectfully submit that no new matter is added to the application by this amendment.

Applicant: Wurz et al.
Application No.: 09/766,815

CLAIM REJECTIONS 35 U.S.C. § 103

Claims 2-23 have been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 4,627,734 ("Rioux") in view of U.S. Patent 5,555,090 ("Schmutz"). Essentially, the rejection relies on Rioux to disclose each of the elements of independent claims 2, 16, 18, and 21, except for the object being moved on the conveyor and the optical inspection system being located on a chassis. This rejection only relies on Schmutz to show an object on a conveyor.

Applicants respectfully submit that all of the amended independent claims (i.e., claims 2, 16, 18, and 21) are patentable over this rejection. The amended independent claims each generally recite: (1) that the redirecting of the light beam toward the conveyor at a nonzero angle from a perpendicular therefrom results in a plurality of conveyor and object impact points as the redirected light beam defines a path across the width of the conveyor; and (2) that the apparatus measures the height of one edge of the object, relative to a conveyor surface, using the non zero angle and a distance between the plurality of object impact points located on the path on the one edge and the corresponding conveyor impact points located on a next adjacent path. Neither of the cited references disclose, teach, or suggest the above elements. Accordingly, Applicants respectfully submit that claims 2, 16, 18, and 21 are patentable over this rejection. Additionally, claims 3-15, 17, 19, 20, 22,

Applicant: Wurz et al.
Application No.: 09/766,815

and 23 each depend, directly or indirectly, on one of claims 2, 16, 18, and 21 and, accordingly, are also patentable over this rejection.

The remaining rejections contained in the office action are directed to independent claims only and rely on the above rejection to render claims 1, 16, 18, and 21 obvious. Accordingly, Applicant respectfully submits that claims 3-15, 17, 19, 20, 22, and 23 are patentable over the cited rejections for at least the above reasons.

New claims 24-27 each generally recite that a portion of the detector field of view, which intersects the conveyor, remains centered about the perpendicular extending from the conveyor throughout the measuring of the object. Applicants respectfully submit that claims 24-27 are further patentable over the cited references.

Applicants respectfully request that the examiner reconsider and withdraw all of the rejections in the outstanding office action in light of the above amendments.

INVITATION

If any additional matters need to be addressed to place this application in condition for allowance, the Examiner is respectfully invited to contact the undersigned, by telephone, at the Examiner's convenience.

Applicant: Wurz et al.
Application No.: 09/766,815

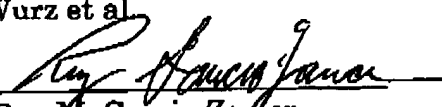
CONCLUSION

In view of the foregoing Amendment and Remarks, Applicants respectfully submit that the present application, including claims 2-27, is in condition for allowance and a notice to that effect is respectfully solicited.

Respectfully submitted,

Wurz et al

By


Ruy M. Garcia-Zamor
Registration No. 44,117
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

RGZ/djw
Enclosures

FAX RECEIVED

AUG - 4 2003

TECHNOLOGY CENTER 2800